

WHAT IS CLAIMED IS:

1 1. A method for mapping disparate data objects from multiple data sources into a single,
2 reusable software component accessible to a software application performed by a computer, for
3 integrated access to the disparate data objects generated dynamically by or contained in multiple
4 data sources stored in at least one electronic storage device coupled to the computer, the method
5 comprising the following steps:

6 (a) for a software application, identifying data objects for mapping;
7 (b) employing an information integration software facility for connecting to data sources
8 of the data objects and registering the data objects with the information integration software
9 facility;
10 (c) using the information integration software facility for creating a single virtual data
11 object consolidating multiple attributes from the registered data objects;
12 (d) for the software application, establishing a connection to the information integration
13 software facility for referencing the virtual data object; and
14 (e) wrapping access to the virtual data object into a reusable software component
15 accessible directly from the software application.

1 2. The method according to claim 1, wherein the information integration software facility
2 having access to multiple data sources, being chosen from a group comprising databases, files
3 and spreadsheets, containing or dynamically generating data from different hardware systems
4 and possibly storing data in different formats.

1 3. The method according to claim 1, wherein the information integration software facility
2 being chosen from a group comprising a multi-database server, a federated data server and an
3 information integration server.

1 4. The method according to claim 1, wherein the software application accessing the reusable
2 software component within a single unit of work.

1 5. The method according to claim 1, wherein the virtual data object being mapped into an
2 entity bean having attributes spanning multiple data sources.

1 6. The method according to claim 5, wherein the entity bean being a container-managed
2 persistence entity bean.

1 7. The method according to claim 1, wherein the software application including an
2 Enterprise JavaBeans (EJB) application.

1 8. The method according to claim 1, wherein the virtual data object being accessed from a
2 group comprising Java servlets, Java Server Pages (JSPs) and Web Services.

1 9. An apparatus for mapping disparate data objects from multiple data sources into a single,
2 reusable software component accessible to a software application performed by a computer,
3 comprising:

4 a computer coupled to at least one electronic storage device for integrated access to
5 disparate data objects generated dynamically by or contained in multiple data sources;
6 programming means, performed by the computer, for identifying data objects for
7 mapping;
8 an information integration software facility for connecting to data sources of the data
9 objects and registering the data objects with the information integration software facility;
10 means, performed by the computer, for using the information integration software
11 facility for creating a single virtual data object consolidating multiple attributes from the
12 registered data objects;
13 means, performed by the computer, for establishing a connection to the information
14 integration software facility for referencing the virtual data object; and
15 means, performed by the computer, for wrapping access to the virtual data object into a
16 Reusable software component accessible directly from the software application.

1 10. The apparatus according to claim 9, wherein the information integration software facility
2 having access to multiple data sources, being chosen from a group comprising databases, files
3 and spreadsheets, containing or dynamically generating data from different hardware systems
4 and possibly storing data in different formats.

1 11. The apparatus according to claim 9, wherein the information integration software facility
2 being chosen from a group comprising a multi-database server, a federated data server and an
3 information integration server.

1 12. The apparatus according to claim 9, wherein the software application accessing the
2 reusable software component within a single unit of work.

1 13. The apparatus according to claim 9, wherein the virtual data object being mapped into an
2 entity bean having attributes spanning multiple data sources.

1 14. The apparatus according to claim 13, wherein the entity bean being a container-managed
2 persistence entity bean.

1 15. The apparatus according to claim 9, wherein the software application including an
2 Enterprise JavaBeans (EJB) application.

1 16. The apparatus according to claim 9, wherein the virtual data object being accessed from a
2 group comprising Java servlets, Java Server Pages (JSPs) and Web Services.

1 17. A program storage device readable by a computer tangibly embodying a program of

2 instructions executable by the computer to perform method steps for mapping disparate data
3 objects from multiple data sources into a single, reusable software component accessible to a
4 software application performed by a computer, for integrated access to the disparate data objects
5 generated dynamically by or contained in multiple data sources stored in at least one electronic
6 storage device coupled to the computer, the method comprising the following steps:

7 (a) for a software application, identifying data objects for mapping;
8 (b) employing an information integration software facility for connecting to data sources
9 of the data objects and registering the data objects with the information integration software
10 facility;
11 (c) using the information integration software facility for creating a single virtual data
12 object consolidating multiple attributes from the registered data objects;
13 (d) for the software application, establishing a connection to the information integration
14 software facility for referencing the virtual data object; and
15 (e) wrapping access to the virtual data object into a reusable software component
16 accessible directly from the software application.

1 18. The method according to claim 17, wherein the information integration software facility
2 having access to multiple data sources, being chosen from a group comprising databases, files
3 and spreadsheets, containing or dynamically generating data from different hardware systems
4 and possibly storing data in different formats.

1 19. The method according to claim 17, wherein the information integration software facility
2 being chosen from a group comprising a multi-database server, a federated data server and an
3 information integration server.

1 20. The method according to claim 17, wherein the software application accessing the
2 reusable software component within a single unit of work.

1 21. The method according to claim 17, wherein the virtual data object being mapped into an
2 entity bean having attributes spanning multiple data sources.

1 22. The method according to claim 21, wherein the entity bean being a container-managed
2 persistence entity bean.

1 23. The method according to claim 17, wherein the software application including an
2 Enterprise JavaBeans (EJB) application.

1 24. The method according to claim 17, wherein the virtual data object being accessed from a
2 group comprising Java servlets, Java Server Pages (JSPs) and Web Services.